

REMARKS / ARGUMENTS

The action by the Examiner in this application, together with the references cited, have been given careful consideration. Following such consideration, claims 1, 6, 9, 16 and 19 have been amended to define more clearly the patentable invention Applicants believe is disclosed herein. Claims 2, 10, 11 and 20 have been canceled, and claims 3, 4, 5, 7, 8, 12-15, 17, 18, 21-25 remain unchanged. Claim 26 has been added. Applicants acknowledge the Examiner's indication that claims 23-25 are allowed. It is respectfully requested that the Examiner reconsider the claims in their present form, together with the following comments, and allow the application.

As the Examiner well knows, the present invention relates to a water filtration system for use in a reprocessor having a circulation system that circulates a liquid sterilant or microbial deactivation fluid through a chamber and a main conduit that forms a part of the circulation system. The water filtration system is located on a portion of the main conduit. The water filtration system includes a water inlet line that is connectable to a source of pressurized water. The water inlet line is connected to the fluid feed line at a first location. A directional valve is disposed within the fluid feed line between the first location and the chamber to facilitate flow through said fluid feed line in a predetermined direction. First and second filter elements are disposed within the fluid feed line for filtering fluids flowing therethrough. The first filter element is downstream of the fluid feed valve and has the capacity to filter particles from the fluid flowing through the main conduit. The second filter element is downstream from the first filter element and has a capacity to filter particles smaller than the first filter element. A bypass

line is connected to the fluid feed line to define a fluid path that bypasses the first intersection, directional valve and first and second filter elements.

According to the present invention, the water filtration system is connected to the fluid circulation system of the reprocessor such that all water entering the reprocessor through the water inlet line must first pass through the filter elements before entering the circulation system and before entering the sterilization chamber. Further, a portion of all fluids circulated through the circulation system of the reprocessor passes through the fluid feed line and filter elements. The foregoing arrangement insures that all water entering the reprocessor is filtered by the filter elements to establish the desired level of filtering.

In the present invention, two dry chemical components are dissolved in a fluid. When mixed, the resulting solutions generate the liquid sterilant. The sterilant is continuously circulated throughout the reprocessor during a sterilization phase of the reprocessor. By passing a portion of all fluids circulated through the circulation system through the filter elements, the filter elements are exposed to the liquid sterilant (or microbial deactivation fluid) such that the entire filter element is exposed to a fluid that will deactivate any microbial contaminants captured by the filter elements. This prevents a build-up of microbial contaminants on the upstream side of the filter, and further prevents the growth of any such decontaminant on the filter element. Still further, passing a portion of all fluids circulated through the bypass line, a higher flow rate of the sterilant to the chamber can be achieved, as compared to a system where all the circulated sterilant flows through the filters. The higher flow rate of the liquid sterilant to the chamber assists in the proper deactivation of microbial contaminants in the chamber.

In accordance with another aspect of the present invention, means are provided for determining the integrity of the filter elements. In this respect, the water filtration system includes means for isolating each filter element from each other. A leak orifice is associated with each filter element and is isolated with each filter element. The leak orifice and the upstream side of each of the isolated filter elements are then pressurized. The integrity of each filter is determined based upon the rate of pressure drop through the filter and through the leak orifice over time. Thus, the pressure test monitors the pressure loss through the leak orifice in conjunction with the pressure loss through the filter to determine the integrity of the filter.

It is respectfully submitted that none of the cited references, alone or together, teaches, suggests or shows the water filtration as claimed.

In response to the Examiner's rejections, claims 1, 9 and 19 have been amended to indicate that the water filtration system is disposed along a portion of the main conduit and includes a bypass line that is connected to the portion of the fluid feed line of the water filtration system. The bypass defines a fluid path that bypasses the first and second filter elements. The claims have further been amended to indicate that the water filtration system also includes a water inlet line that connects to a fluid feed line. All water entering the reprocessor first passes through the water inlet line and the filter elements in the fluid feed line. During the deactivation cycle of the reprocessor, a portion of all fluids circulated through the circulation system passes through the filter elements. Applicants respectfully submit that none of the cited references, alone or together, teaches, suggests or shows a water filtration system or reprocessor as currently claimed.

The claims stand rejected under 35 U.S.C. Section 103(a) as being unpatentable under 35 U.S.C. Section 103(a) primarily in view of U.S. Patent No. 4,617,065 to Sundheimer and U.S. Patent No. 4,431,545 to Pall et al.

It is respectfully submitted that the '065 patent to Sundheimer does not teach, suggest or show a reprocessor or water filtration system as presently claimed. The Sundheimer '065 patent discloses a method for liquid disinfecting and sterilization including a filter assembly within a bypass line. The system shown discloses a filtration system for "selectively sterilizing the fluid prior to introduction into the inner vessel 22." (See column 4, lines 44-45 of the '065 patent). In this respect, the disclosed system does not teach, suggest or show a water filtration system disposed within a circulation system wherein a portion of liquid sterilant generated within the circulation system is continuously circulated through the water filtration system during the deactivation of the contents of the chamber, i.e., during a sterilization cycle. Moreover, it does not teach, suggest or show a bypass line connected to a portion of the fluid feed line containing the filters wherein the bypass line bypasses the filter elements. In the system disclosed in the '065 patent, fluid is not continuously circulated through the filters during the deactivation of the contents of the chamber.

It is respectfully submitted that the claims in their present form define a water filtration system and reprocessor that are distinguishable from the system shown in the '065 patent to Sundheimer. A reading of the '065 patent teaches selective use of the filter elements in the Sundheimer system, primarily for filtering rinse water after a sterilization cycle. Accordingly, the disclosed system does not teach, suggest or show a structure that allows for the continuous flow of a liquid sterilant through the filter elements during a sterilization cycle. The disclosed

structure also does not teach, suggest or show a structure that includes a bypass line wherein a portion of all fluids passing through the circulation system including a liquid sterilant or microbial deactivation fluid, passes through the filter elements during the operation of the circulation system.

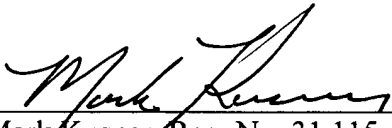
Applicants respectfully submit that since the Sundheimer '065 patent does not teach, suggest or show the basic structure set forth in the claims as currently amended, and the teachings of the '545 patent to Pall et al., Japanese Ref. No. JP11-128158 to Nakanishi et al., and European Ref. No. EP 0 945 140 do not teach the deficiencies noted above, the claims in their present form are allowable.

For the foregoing reasons, Applicants respectfully submit that the claims in their present form are distinguishable from the cited references, and favorable action is therefore respectfully requested.

Respectfully submitted,

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I hereby certify that this correspondence (along with any paper referenced as being attached or enclosed) is being deposited on the below date with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to MAIL STOP RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: November 21, 2005


Christine Goellner